

Section 400 - Emergency Operations

Operational Safety - 400.00					
S.O.P. # 400.01 Personal Protective Equipment PAGE:					
EFFECTIVE: 07-01	1-01 Approved: John Filer, Chief				
REVISED: 11-22-	16 Approved: William Stephens, Director				

400.01.01 Purpose

The purpose of this SOP is to establish policies and procedures for the issuance, composition, presentation, appearance, replacement and return of Charles County Department of Emergency Services (CCDES) personal protective equipment (PPE). This SOP is not intended to replace standard and prudent blood borne pathogen and or isolation practices (masks, gowns and gloves, etc...) but augment the use of said practices with additional protective equipment specifically designed for provider safety.

400.01.02 General

This SOP is a departmental adjunct to the Charles County Safety Manual.

400.01.03 Applicability

This SOP is applicable to all uniformed personnel.

400.01.04 **Definitions**

- 1. ALS Certification/Specialty Team/Station Emblems: Categories of officially approved emblems and patches that may be issued or purchased by the employee.
- 2. **ANSI:** The American National Standards Institute or ANSI is a private non-profit organization that oversees the development of voluntary consensus standards for products, services, processes, systems, and personnel in the United States.
- Approved: An item that complies with all federal, state and industrial safety standards and codes, CCDES policies and directives, and is specifically authorized by the Director or his/her designee.
- 4. **Ballistic PPE:** Soft body armor designed to stop or reduce the kinetic energy transfer of a ballistic projectile.



- Compliant: Conforming to federal, state and local safety guidelines, industry standards and practices.
- Contaminated: A condition of being soiled, stained, touched, or otherwise exposed to harmful agents, making an object potentially unsafe for use as intended or without barrier techniques. An example is entry of infectious or toxic materials into a previously clean or sterile environment.
- 7. **Distributed/Issued:** The means by which the CCDES Logistics Section conveys approved uniform items and apparel that are purchased with County funds.
- 8. **Doff:** The action verb, to take off.
- 9. **Don:** The action verb, to put on and/or wear.
- Employee Purchased PPE: An item of approved apparel purchased solely with employee funds. These items may include protective eyewear, alternative footwear, alternative protective gloves, et. al.
- 11. Level A PPE: To be selected when the greatest level of skin, respiratory, and eye protection is required. The following constitute Level A equipment; it may be used as appropriate; positive pressure, full face-piece self-contained breathing apparatus (SCBA), or positive pressure supplied air respirator with escape SCBA, approved by the National Institute for Occupational Safety and Health (NIOSH). Ex. Totally-encapsulating chemical-protective suit.
- 12. Level B PPE: Used when the highest level of respiratory protection is necessary but a lesser level of skin protection is needed. The following constitute Level B equipment; it may be used as appropriate, Positive pressure, full-face piece self-contained breathing apparatus (SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved). Ex. Hooded chemical-resistant clothing (overalls and long-sleeved jacket; coveralls; one or two-piece chemical-splash suit; disposable chemical-resistant overalls).
- 13. Level C PPE: Used when the concentration(s) and type(s) of airborne substance(s) is known and the criteria for using air purifying respirators are met. The following constitute Level C equipment; it may be used as appropriate:
 - a. Full-face or half-mask, air purifying respirators (NIOSH Approved).
 - b. Hooded chemical-resistant clothing (overalls; two-piece chemical-splash suit; disposable chemical-resistant overalls).
 - c. Coveralls.(NFPA Compliant)
 - d. Gloves, outer and inner, chemical-resistant.
 - e.Boots (outer), chemical-resistant steel toe and shank.(NFPA Complaint, ANSI Approved)
 - f. Boot-covers, outer, chemical-resistant (disposable).(NFPA Complaint, ANSI Approved)
 - g. Helmet. (ANSI Approved)



- 14. Level D PPE: A work uniform affording cut, flash and fire protection, which can be used for effective nuisance contamination (NFPA Compliant). The following constitute Level D equipment; it may be used as appropriate:
 - a. Structural Fire or "Turnout" Gear (NFPA Compliant).
 - b. Cut and Flash Resistant Gloves. (NFPA Complaint)
 - c. Boots, flash-resistant, chemical-resistant steel toe and shank. (NFPA Complaint, ANSI Approved)
 - d. Safety Glasses (ANSI Approved)
 - e. Issued Helmet. (NFPA Compliant, ANSI Approved)
 - f. Issued Escape Mask.(NIOSH Approved)
 - g. Hearing Protection. (ANSI Approved)
 - h. SCBA as indicated by Incident Commander and/or situation dictates.
- 15. **Negligence:** An individual's failure to exercise reasonable care under the circumstances.
- 16. NFPA: National Fire Protection Association.
- 17. NIOSH: The National Institute for Occupational Safety and Health (NIOSH) is the United States federal agency responsible for conducting research and making recommendations for the prevention of work-related injury and illness.
- 18. **On-duty:** Status indicating a CCDES employee is in pay status, performing a work substitution, or otherwise officially representing CCDES.
- 19. **OSHA:** Occupational Safety and Health Administration, a government agency in the Department of Labor to maintain a safe and healthy work environment.
- 20. Patch or Emblem: An identifying label affixed to a uniform jacket, shirt or blouse indicating an employee's membership on a specialty team, certification or other assignment as specifically approved by the Director of CCDES.
- 21. **PFD:** Personal Floatation Device. All CCDES PFD's will be US Coast Guard approved.
- 22. **PPE Inspection Log:** The form used to track and note the findings and condition of issued PPE on an annual basis.
- 23. SCBA: Self Contained Breathing Apparatus
- 24. **Service Life:** A product's service life is its expected lifetime, or the acceptable period of use in service. It is the time that any manufactured item can be expected to be 'serviceable' or supported by its originating manufacturer.
- 25. **Standard Issue PPE:** Category of specific items of PPE issued to CCDES employees on a service life cycle or as needed through regular wear and tear.



- 26. **Uniform Requisition Form**: The *DES Uniform Requisition Form* is the form which an employee completes and submits to their supervisor when they need to repair or replace an issued uniform or apparel item.
- 27. Uniform Voucher: The DES Uniform Voucher is the form which is issued to the employee by the Logistics Officer when needed uniform or apparel items are not kept in stock. The DES Uniform Voucher is presented to the articulated vendor by the employee for completion.

400.01.05 Relevant Codes and Standards

- 1. OSHA Rule 29 CFR 1910.1030
- 2. NFPA 1500, 2007 Edition: Standard on Fire Department Occupational Safety and Health Program
- 3. NFPA 1851, 2008 Edition: Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting
- 4. NFPA 1951, 2007 Edition: Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting
- 5. NFPA 1971, 2007 Edition: Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting
- 6. NFPA 1975, 2004 Edition: Station/Work Uniforms for Fire and Emergency Services
- 7. NFPA 1977, 2005 Edition: Standard on Protective Clothing and Equipment for Wildland Fire Fighting
- 8. NFPA 1991, 2005 Edition: Standard on Vapor-Protective Ensembles for Hazardous Materials Emergencies
- NFPA 1992, 2005 Edition: Standard on Liquid Splash-Protective Clothing for Hazardous Materials Emergencies
- NFPA 1994, 2007 Edition: Standard on Protective Ensembles for First Responders to CBRN Terrorism Incidents
- 11. NFPA 1999, 2008 Edition: Standard on Protective Clothing for Emergency Medical Operations
- 12. ANSI Z87.1-1989 Eye and Face Protection: (USA Standard for Occupational and Educational Eye and Face Protection).
- 13. ANSI Z89.1-1986 Head Protection
- 14. ANSI Z41.1-1991 Foot Protection



400.01.06 Policy

- 1. All issued PPE items and equipment remain the property of Charles County Government and must be remitted upon the employee's separation of service or as the PPE items and/or equipment are retired from useful service.
- 2. PPE items and equipment must be outfitted and worn in compliance with this policy.
- 3. Employees must wear or display only the approved PPE items and equipment defined in this policy and must maintain them in compliance with this policy.
- 4. All on-duty personnel must wear the appropriate level of PPE as established by this policy.
- 5. Employees must appear clean, neat and presentable at all times. The Duty Officer will determine the acceptable level and presentation of PPE items and equipment.
- 6. Issued PPE items are to be worn when appropriate during on-duty hours or when representing the Department; and **not be** worn for external department activities (i.e., secondary employment and or volunteer service).
- Issued PPE jumpsuits must be worn in such a way that they are zipped no less than five
 (5) to six (6) inches below the collar line. It is unacceptable for personnel to wear or
 present their issued jumpsuits tied around the waist.
- 8. Alternative non-issue PPE items and accessories such as alternative protective eyewear, gloves, boots, etc...may be worn with the written approval of the Safety Officer, Chief and/or the Director.
- All alternative non-issue PPE items and equipment/accessories must meet or exceed the most current NFPA, OSHA, NIOSH and/or ANSI standards and/or regulations for that particular type of PPE item.
- 10. Employees are prohibited from consuming alcoholic beverages while wearing or displaying any part of issued PPE items and/or equipment.
- 11. Employees who have been suspended or relieved from duty **shall not** wear or display any part of issued PPE items and/or equipment.
- 12. Employees must use an indelible pen to mark PPE items and equipment (when possible) with their department identification number. These markings must not be visible on the outside of the PPE item/equipment.
- 13. Employees are prohibited from modifying or altering issued PPE items and equipment in any way that does not comply with the provisions of this Policy and/or the manufacturer's specifications. Approved alterations may only be performed by trained and certified (by the manufacturer) technicians.
- 14. Newly issued PPE items that do not fit properly must be returned to the Logistics Officer within thirty (30) days of issuance. The employee must provide the Logistics Officer with the reason the items are being returned.
- 15. Persons who are not credentialed and/or trained in fire suppression shall not at any time perform such tasks or duties.
- 16. While on-duty, issued PPE shall be placed on the assigned employees' unit and/or apparatus ready for use at all times.
- 17. While off-duty it is the direct responsibility of the employee to secure and account for his/her issued PPE at all times.
- 18. Each employee will be trained on the care, maintenance, donning, doffing and decontamination procedures related to PPE items and equipment issued.



400.01.07 Reporting Procedures for Lost, Stolen or Damaged PPE or Equipment

- When any PPE component or equipment is discovered to be lost, stolen or damaged, the
 employee must report this fact to their supervisor. The supervisor will then investigate the
 circumstances and determine cause. If the loss or damage is the result of an employee's
 negligence, as defined in this policy, the employee may be responsible for the replacement
 or repair of the item.
- 2. An employee must complete a *Uniform Requisition Form* and submit it to their supervisor in order to begin the PPE replacement or repair process. Stolen items valued at \$100 or more must be reported to the law enforcement agency having jurisdiction. A copy of the police report must accompany the *Uniform Requisition Form*.
- An employee is required to complete a *Uniform Requisition Form* any time the replacement of lost, stolen, damaged, unserviceable or miss fitting PPE articles are required. An employee is not required to complete a *Uniform Requisition Voucher* for newly issued PPE items and apparel.
- 4. PPE items and equipment will be inspected on an annual basis to insure that each issued item is present, clean and meets the manufacturer's standards/specifications for service life compliance. Documentation of each annual inspection will be made on the employee's Charles County PPE Inspection Log.
- 5. If a PPE item is determined to be unserviceable by a supervisor, both the supervisor and the employee should make documentation of such on the Inspection Log. The Supervisor will then return the unserviceable item/s to the Logistics Officer who will verify that the item/s is in fact unserviceable. If the item/s are deemed unserviceable then said item/s will be disposed of appropriately.
- 6. Damaged or unserviceable PPE items must be disposed of in the proper manner. The proper manner for uniform disposal shall be:
 - i. Complete a *Uniform End of Service Declaration Form* for the article being disposed of,
 - ii. Remove of all patches and emblems;
 - iii. Shred or destroy by crushing the PPE item in an manner so that it may no longer be worn or used by another individual;
 - iv. Throw the shredded or destroyed item into the dumpster or trash.

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400.01.08 Replacement and/or Removal of PPE from Service

- Any PPE item may be replaced and/or removed from service at any time for the following reasons:
 - i. PPE is damaged beyond repair,
 - ii. PPE is hazardous to life and/or safety;
 - iii. PPE is contaminated beyond an acceptable level where "normal" cleaning is safe or prudent;
 - iv. PPE has reached its maximum service life as recommended by the manufacturer;
 - v. PPE no longer fits properly;
 - vi. PPE malfunctions or does not perform as designed.
- 2. Any employee who notes a need for PPE replacement or removal from service while conducting a daily or post incident gear inspection for any of the aforementioned reasons should notify their supervisor immediately and complete an *Incident Report Form*.
- 3. The supervisor will then collect the PPE in question and tag it for inspection by both the Logistics and Health and Safety Officer.
- 4. The employee will immediately be issued either a permanent or temporary replacement piece of gear.
- 5. It is the duty of both the Logistics and Health and Safety Officers to inspect the PPE item in question and take appropriate actions.
- 6. PPE that has been removed from service shall be tagged as such and disposed of in accordance with this policy.

400.01.09 Responsibilities

- Employees must clean and maintain issued PPE items and equipment according to the manufacturer's instructions.
- 2. **Employees** must comply with the PPE issuance schedule as needed for routine replacement.
- 3. **Employees** are responsible for changing out patches that are not of initial standard issue at their own expense.
- 4. **Employees** are responsible for having their issued PPE items and equipment with them during each shift and don it when needed.
- 5. The Health and Safety Officer is responsible for conducting annual PPE inspections.
- 6. **Supervisors** are responsible for insuring that all of their personnel have the proper training on the PPE items and/or equipment they have been issued.
- 7. **Supervisors** and senior ranking officers are responsible for insuring that those whom they supervise comply with this policy.
- 8. Incident Commanders and/or their designated Scene Safety Officer have the responsibility of insuring all personnel on the incident scene are wearing the appropriate level of PPE attire.
- 9. **The Director** and/or his/her designee shall have the authority to establish or change PPE standards or policies as deemed necessary.



400.01.10 Standard Issue PPE Items

Each employee will be issued the following standard issue PPE items and equipment at their initial point of employment.

Uniform Item	Color	Quantity	
Structural Firefighting Jacket	Khaki	1	
Structural Firefighting Pants	Khaki	1	
Structural Firefighting Boots	Black	1 pair	
Suspenders	Black or Red	1 pair	
Structural Fire Gloves	Varies	1 pair	
Rescue Gloves	Varies	1 pair	
Structural Firefighting Helmet	Black	1	
Safety Goggles	Black	1 pair	
Safety Glasses	Black w/ clear lenses	1 pair	
Disposable Hearing Protection	Varies	10 sets	
Nomex Hood	Khaki	1	
SCBA Face Mask	N/A	1	
SCBA Mask Bag	Red	1	
40 mm CBRNE Cartridge	N/A	1	
40 mm Cartridge Adapter	N/A	1	
Rolling Gear Bag	Red	1	
ANSI Class II Safety Vest	Hi-Vis Yellow	1	

400.01.11 Care, Cleaning and Maintenance of PPE

- 1. Cleaning, maintenance and care of all PPE items and/or equipment should be performed in accordance with the specifications and instructions as set by the manufacturer.
- 2. Cleaning of soiled Level D PPE should be done so in a washing machine designed or designated to clean that particular load.
- 3. Only cleaning solutions that are approved by the manufacturer should be used on PPE items.
- 4. At no point in time should an employee make untrained or unauthorized repairs or modifications to their issued PPE.
- 5. PPE items or gear shall not be stored:
 - i. Unsecured,
 - ii. In an area that is susceptible to combustibles;
 - iii. In an area that is susceptible to contamination;
 - iv. Outside of the approved storage methods set forth by the manufacturer.



400.01.12 Required Use of PPE

Personnel are required to don their issued and/or supplied PPE/Gear in accordance with this Policy's PPE Decision Matrix.

Situation or Activity	Level of PPE	Exceptions
When the employee is performing patient care or rescue activities in or around a motor vehicle/s that has been compromised or has the potential for exposure to cuts, fire, flashover or chemicals.	Level D	Personnel operating outside of the deemed Warm Zone
When the employee is performing patient care or rescue activities in or around the fire ground where there is the potential for exposure to fire, flashover or hazardous chemicals and toxic gasses.	SCBA if directed by the IC	Personnel operating outside of the deemed Warm Zone
When the employee is performing patient care or rescue activities in or around a Hazmat, WMD and/or CBRNE incident where there is the potential for exposure to fire, flashover or hazardous chemicals and toxic gasses.	Or higher as directed by the IC, Safety Officer or Hazmat Branch Supervisor	Personnel operating outside of the deemed Warm Zone
Anytime when the employee is performing patient care or rescue activities on a public highway or road where they may be exposed to light or heavy traffic.	ANSI Class II (or higher) Traffic Safety Garment	None
Anytime when the employee is performing patient care or rescue activities on or around any body of water with a possible depth in excess of 1 foot.	USCG Approved PFD	None
Anytime when the employee is performing patient care or rescue activities on or around a technical rescue environment where there is the potential for a high angle fall, confined space entrapment, structure collapse, earthen burial and/or fire.	NFPA Certified Class III Rescue Harness	Personnel operating outside of the deemed Warm Zone
	patient care or rescue activities in or around a motor vehicle/s that has been compromised or has the potential for exposure to cuts, fire, flashover or chemicals. When the employee is performing patient care or rescue activities in or around the fire ground where there is the potential for exposure to fire, flashover or hazardous chemicals and toxic gasses. When the employee is performing patient care or rescue activities in or around a Hazmat, WMD and/or CBRNE incident where there is the potential for exposure to fire, flashover or hazardous chemicals and toxic gasses. Anytime when the employee is performing patient care or rescue activities on a public highway or road where they may be exposed to light or heavy traffic. Anytime when the employee is performing patient care or rescue activities on or around any body of water with a possible depth in excess of 1 foot. Anytime when the employee is performing patient care or rescue activities on or around a technical rescue environment where there is the potential for a high angle fall, confined space entrapment, structure	When the employee is performing patient care or rescue activities in or around a motor vehicle/s that has been compromised or has the potential for exposure to cuts, fire, flashover or chemicals. When the employee is performing patient care or rescue activities in or around the fire ground where there is the potential for exposure to fire, flashover or hazardous chemicals and toxic gasses. When the employee is performing patient care or rescue activities in or around a Hazmat, WMD and/or CBRNE incident where there is the potential for exposure to fire, flashover or hazardous chemicals and toxic gasses. Anytime when the employee is performing patient care or rescue activities on a public highway or road where they may be exposed to light or heavy traffic. Anytime when the employee is performing patient care or rescue activities on or around any body of water with a possible depth in excess of 1 foot. Anytime when the employee is performing patient care or rescue activities on or around a technical rescue environment where there is the potential for a high angle fall, confined space entrapment, structure



400.01.13 Policies Specific to Issued Ballistic PPE

- 1. Only the issued ballistic PPE shall be worn on-duty.
- 2. The issued ballistic PPE is for on-duty use only.
- 3. While on-duty, the situational use of issued ballistic PPE is at the discretion of the employee.
- 4. Only issued items, equipment, identification patches and insignias are permitted on the ballistic PPE.
- 5. The employee is responsible for properly securing their issued PPE at all times.
- 6. Lost or stolen ballistic PPE shall be immediately reported to the on-duty supervisor.
- 7. Damage to the issued ballistic PPE should be reported for inspection and/or replacement as needed immediately upon notice.
- 8. Improperly fitted ballistic PPE should be reported for inspection and/or replacement as needed immediately upon notice.
- 9. The issued ballistic PPE shall not be altered in any way by the employee.
- 10. Issued ballistic PPE should be cared for in accordance with the manufacturer's specifications and instructions.